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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,625	07/13/2001	Meera Desikamani	42390P12062	3704

7590	03/11/2005	EXAMINER	
		HOFFMAN, BRANDON S	

Michael R. Barre
c/o BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/905,625	DESIKAMANI ET AL.
	Examiner	Art Unit	
	Brandon S Hoffman	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-19_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-19_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _13 July 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____.
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5)☐ Notice of Informal Patent Application (PTO-152)
     Paper No(s)/Mail Date _____.   6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Raith (U.S. Patent No. 5,237,612) in view of Huang et al. (U.S.

Patent No. 6,477,543).

Regarding claims 1, 8, 12, 16, and 18, Raith teaches a method/machine-

accessible medium for a first device and a second device to maintain synchronization of

a shared, dynamic secret, the method comprising:

- The second device sending an authentication request to the first device (col. 17,

  lines 12-18);

- The first device, in response to the authentication request,

  - Authenticating the second device (col. 17, lines 16-18),

  - Sending an authentication reply to the second device (col. 17, lines 18-

    20), and

  - Advancing a first copy of the secret (col. 17, lines 35-40);

- The second device, in response to the authentication reply,

- o Advancing a second copy of the secret (col. 17, lines 35-40, the second
  device would have to advance its copy of the rolling code or else it would
  be pointless in having a rolling code);
- The first device,
  - o Sending data to the second device (col. 20, lines 9-12),
  - o Again advancing the first copy of the secret (col. 19, lines 62-67);
- The second device,
  - o Consuming the data (col. 20, lines 9-12), and
  - o Again advancing the second copy of the secret (col. 19, lines 62-67, the
    second device would have to advance its copy of the rolling code or else it
    would be pointless in having a rolling code).

Raith does not teach the first device sending a data completion message to the

second device. However, it can be argued that the first device sends a completion

message because the call ends successfully. Some type of message would have to be

sent from the first device to the second device in order for proper termination of the call.

Huang et al. teaches the first device sending a data completion message to the

second device (col. 12, lines 51-55).

It would have been obvious to one of ordinary skill in the art, at the time the

invention was made, to combine sending a data completion message to the second

device, as taught by Huang et al., with the method of Raith. It would have been obvious

for such modifications because a termination message indicates the resources used are

no longer needed, thus freeing up resources.

Regarding claim 2, the combination of Raith in view of Huang et al. teaches

wherein the first device comprises a server and the second device comprises a web

appliance (see fig. 1, ref. num 101/106 of Huang et al.).

Regarding claims 3 and 9, the combination of Raith in view of Huang et al.

teaches further comprising:

- The first device storing the again advanced first copy of the secret (see col. 20,

  lines 17-21 of Raith); and

- The second device storing the again advanced second copy of the secret (see

  col. 20, lines 17-21).

Regarding claim 4, the combination of Raith in view of Huang et al. teaches

further comprising executing a recovery technique in response to the first and second

copies of the secret becoming out of synchronization (see col. 20, lines 15-46 of Raith).

Regarding claim 5, Raith teaches a system for use on a network, the system

comprising:

- A server including,

- o A communication interface (fig. 3, ref. num 119'/120'),

- o A processor for performing logic operations (fig. 3, ref. num 134'),

- o Storage (fig. 3, ref. num 116'),

- o Stored in the storage, a first copy of a secret (fig. 3, ref. num 116' and col. 16, lines 29-35),

- o A secret validator (col. 17, lines 15-18), and

- o Means for advancing the first copy of the secret (fig. 3, ref. num 119'/120');

- A web appliance including,

  - o A communication interface coupling the web appliance to the server over the network (fig. 2, ref. num 119/120),

  - o A processor for performing logic operations (fig. 2, ref. num 134),

  - o Storage (fig. 2, ref. num 116),

  - o Stored in the storage of the web appliance, a second copy of the secret (fig. 2, ref. num 116 and col. 16, lines 29-35),

  - o Means for advancing the second copy of the secret (fig. 2, ref. num 119/120); and

- The server and the web appliance further including, a protocol for recovering synchronization of the first and second copies of the secret (col. 20, lines 15-46).

Raith does not teach the first device is a server and the second device is a web appliance.

Huang et al. teaches the first device is a server and the second device is a web
appliance (fig. 1, ref. num 101/106).

It would have been obvious to one of ordinary skill in the art, at the time the
invention was made, to combine the use of a server and web appliance as devices, as
taught by Huang et al., with the system of Raith. It would have been obvious for such
modifications because a server provides services to many clients over a network.

Regarding claims 6 and 13, the combination of Raith in view of Huang et al.
teaches wherein the secret comprises a PIN (see col. 9, line 64 through col. 10, line 4 of
Huang et al.).

Regarding claims 7 and 14, the combination of Raith in view of Huang et al.
teaches wherein the PIN comprises a number of at least 80 bits (see col. 23, lines 6 of
Raith, 12 bits of the rolling code are used. The claim limitation calls for at least 80 bits,
however, Raith teaches 12 bits. As technology advances, more bits can be realized in a
system. Raith's teachings were in 1991—10 years later (which is a very long time for
improvement in computer terms) the instant application was filed. It is within reason
that the rolling code can consist of 80 or more bits).

Regarding claims 10 and 17, the combination of Raith in view of Huang et al.
teaches further comprising the client device in response to not receiving an affirmative
authentication reply from the server device,

- Advancing the first copy of the secret (see col. 17, lines 25-30 of Raith),

- Sending the advanced first copy of the secret to the server device (see col. 17,
  lines 25-30 of Raith).

Regarding claim 11, the examiner takes Official notice that advancing the first
copy of the secret comprises twice advancing the first copy of the secret would have
been an obvious modification. Although Raith never states how many times the rolling
code is advanced, it is well within the general understanding in the art that the rolling
code can be advanced once, twice, or any other arbitrary number—as long as the
second copy is advanced as many times as the first. The number of times the code is
advanced can even change with each transmission, thus creating more security in the
system.

Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Raith (USP '612) in view of Huang et al. (USPN '543), and further in view of Schulz
(U.S. Patent Pub. 2002/0138737 A1).

Regarding claims 15 and 19, the combination of Raith in view of Huang et al.
teaches further comprising determining that the appliance is not authentic and,

responsive to that determination, disconnecting communication to the appliance (see

col. 19, lines 43-45 of Raith).

The combination of Raith in view of Huang et al. does not teach logging the failed

authentication request.

Schulz teaches logging the failed authentication request (paragraph 0058).

It would have been obvious to one of ordinary skill in the art, at the time the

invention was made, to combine logging the failed authentication request, as taught by

Schulz, with the system of Raith/Huang et al. It would have been obvious for such

modifications because a log contains a history for an account that can be used for

reporting.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brandon Hoffman whose telephone number is 571-272-

3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free).

BH

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100